

25

Date: Wednesday, 5/23/2007 3:59:27 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 350 SKIDTUBE ASSEMBLY LH  
 Job Number : 32526  
 Estimate Number : 10266  
 P.O. Number :  
 This Issue : 5/23/2007 S.O. No. :  
 Prsht Rev. : NC Part Number : D350636013  
 First Issue : 1/1 Type : LANDING GEAR Drawing Number : D2750 UNDER REVIEW 07.05.24 CB  
 Drawing Revision : D  
 Previous Run : 31679 Material :  
 Due Date : 6/22/2007 Qty: 1 Um: Each  
 Written By :  
 Checked & Approved By : 07.05.24  
 Comment : Est Rev: H 02.09.25 Rearranged procedure steps KJ  
 est rev I 06.03.30 Per rev. D dwg EC

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-013 CHG 002

2.0 D26003BENT Extrusion Bent



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

B 30066

7-6-4

3.0 D2744 Fwd Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch

B 29784

R/E

7-06-07

4.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8864 drilling holes labelled "B" only.

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8864 and cut as per dwg D2750.

R  
7-6-4

R  
7-6-5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:59:27 PM  
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Drill pilot holes for Detail B using DT8330

5-Open float holes to .375"

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.250" \*\*\*Make sure that wearplate holes are on bottom of tube\*\*\*\*\*

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

8- Countersink all fwd wearshoe holes (total of 19 holes per side) DO NOT C'SINK THE LAST AFT HOLES (total of 2 per side for blade fitting) as per dwg D2750.

9-Countersink Detail A as per dwg D2750.

10-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750 .

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004  
A/R Aluminum Rod *m102421 BE 07-06-07*

12-Grind welds flush as per Dwg D2750 *pm 07-06-07*

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*DP 07-06-07*

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*DP 7-6-7*

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*pm 07-06-07*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*DP 7-6-14*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

Batch:

B 33 582

K 7-6-14

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B 32045

BE 07-06-20

11.0

D34905

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch:

B 32597

BE 07-06-20

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Crossbolt Spacer

Batch:

B 29011

BE 07-06-20

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes "size X" (total of 4 holes per side) as per dwg D2750

2-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side)  
as per dwg D2750.

3-Chamfer holes of Detail V, Detail C, hole size "W" and "X" per dwg D2750 (welding instructions on sheet  
5)

4-Deburr and blow out all chips from inside of tube

5-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch:

M 103561

exp. date: 7-10-1

6- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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## Process Sheet

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

(welding instructions on sheet 5)

A/R Aluminum Rod batch: M104305

7-Grind welds flush as per Dwg D2750 fm 07-06-2001

8-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750 fm 07-06-2001

9-Deburr holes fm 07-06-2001

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/06/08 (1)

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

June 26 01

16.0

POWDER COATING

POWDER COATING



M105068



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

IX  
M-L 07/08/08  
PRESS. WASH PR 07-08-07

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

FL 07/08/10 (1)

18.0

NAS1330S3KB166

INSERT



Comment: Qty.: 42.0000 Each(s)/Unit Total : 42.0000 Each(s)

INSERT

Batch: M105039

FL

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

FL 07/08/10 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of-NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT INSERTS

En 07/08/10 (X)

21.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)

Wearpad

Batch: B31695

FL

22.0

D265613

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: B32653

FL

23.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: B30554

FL

24.0

D2746

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: B30141

FL

25.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: B31697

FL

26.0

D3488041

BLADE FITTING ASSEMBLY, LH



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade Fitting LH

Batch: B32232

1107-08-14 FL 07/08/10 (P)

W/O: -		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
08/01/21	25.0	Re-stock part D2745 Bushing. Qty: 8 Batch: D31697	FL	08/01/21	8			
08/01/21	26.0	Re-stock part D3488041 Blade fitting Qty: 1 Batch: D32232	FL	08/01/21	1			
08/01/21	27.0	Re-stock part D26483 wearpad Batch: <del>31695</del> 31695	FL	08/01/21	5			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries

Date: Wednesday, 5/23/2007 3:19:27 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:	Machine Or Operation:	Description :
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27.0	D3492041	PLUG ASSEMBLY
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Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
PLUG ASSEMBLY  
Batch: 1532598

28.0	D3492045	PLUG ASSEMBLY
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Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
PLUG ASSEMBLY  
Batch: 1550131

29.0	AN3C5A	Bolt
------	--------	------



Comment: Qty.: 38.0000 Each(s)/Unit Total : 38.0000 Each(s)  
Bolt  
Batch: m103603

30.0	AN3C6A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Bolt  
Batch: m103693

31.0	AN3C7A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
BOLT  
Batch: m103668

32.0	AN6C44A	BOLT
------	---------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
BOLT  
Batch: m103864

33.0	AN8C35A	BOLT
------	---------	------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
BOLT  
Batch: m102671

FL 07/08/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08/01/21	27.0 to 33.0	Re-stock all parts.	FL	08/01/21			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:59:27 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

AN960C10L

washer

✓



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)

washer

Batch: m105143

FL

35.0

AN960C816L

WASHER

✓



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: m104093

FL

36.0

MS210436

NUT

✓



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

NUT

Batch: m103693

FL

37.0

MS21083C8

NUT

✓



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

NUT

Batch: m101625

FL

38.0

NAS1515H3L

WASHER



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)

WASHER

Batch: m104603

FL

39.0

NAS1515H8L

WASHER



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

WASHER

Batch: m104922

FL

40.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Spray inside of tube with "LPS-3" batch: m105085  
Inspect for foreign objects as Dart QSI 024

FL 07/08/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08/01/21	34.0 to 37.0	Re-stock all parts.	FL	08/01/21			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 5/23/2007 3:59:27 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750  
SIKA FLEX 241  
BATCH: M04989  
EXP DATE: 08/01

3-Coat all exposed fasteners with "LPS Procyon"

batch: M104251

FL 07/08/10 ①  
PTO

41.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Pick Packing Kit

43.0

D2741

Blade



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Blade  
Batch: \_\_\_\_\_

44.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Washer  
Batch: \_\_\_\_\_

45.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Nut  
Batch: \_\_\_\_\_

46.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Bolt  
Batch: \_\_\_\_\_

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

See NCR 202

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 1 Date: 08.01.21  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.01.17	40.0	Upon Ass'y the holes in the tube were too far off center, & all mis-aligned. black fitting do not install! R.C: Drill & re-drill not sit correctly on the tube		See NCR 202 - scrap & destroy stock & I.D all possible hardware.				<u>08.01.17</u>

NOTE: Date &amp; initial all entries



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## Process Sheet

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Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 32526

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

47.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
WASHER  
Batch: \_\_\_\_\_

48.0

D34931

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
WASHER  
Batch: \_\_\_\_\_

49.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

50.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Package as per PPP D350-636-013

51.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*Kim 2006/1/21*  
*W O X*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D2750	REV. D SHEET 1 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3/D2750-4 INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133/9157	

RELEASED  
*06.02.07*

UNDER REVIEW *OK*  
*CB*

*07.02.05* *CB*

*add gaskets  
change to SS wear plates*

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
5	5	5	5	D2648-3	WEARPAD
1	1	1	1	D2656-13	WEARSHOE
1	1	1	1	D2656-35	WEARSHOE
1	1	1	1	D2746	WEARSHOE
1	1	1	1	D2739	WEB
1	1	1	1	D2741	BLADE
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
2	2	2	2	AN8C21A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
4	4	4	4	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
3	3	3	3	MS21083C8	NUT
42	42	42	42	NAS1330S3KB166	INSERT
46	46	46	46	NAS1515H3L	WASHER
12	12	12	12	NAS1515H8L	WASHER

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *32526*

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DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2750	REV. D SHEET 2 OF 5
DATE 06.01.05		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

**UNDER REVIEW**

07.02.05 CB

SS wearplates

OK  
CB

**RELEASED**  
06.02.07

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.150 \pm 0.010$  IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.15 \pm 0.030$  IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS E-E, F-F, AND R-R.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:  
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL NAS1330S3KB166 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'E' SIZE HOLES ( $\emptyset 0.250$ -  $\emptyset 0.257$ ) FOR WEARSHOE INSERTS. C'SINK  $\emptyset 0.391 \times 100^\circ$  AND INSTALL INSERTS
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3-5A/AN3-7A WEARSHOE SCREWS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
12. APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES

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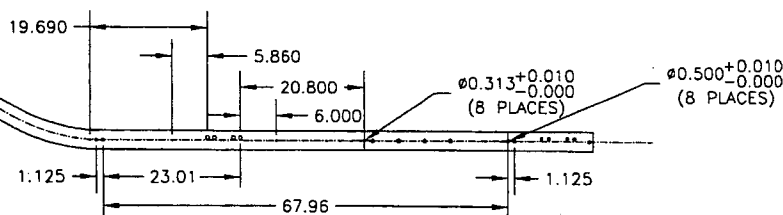
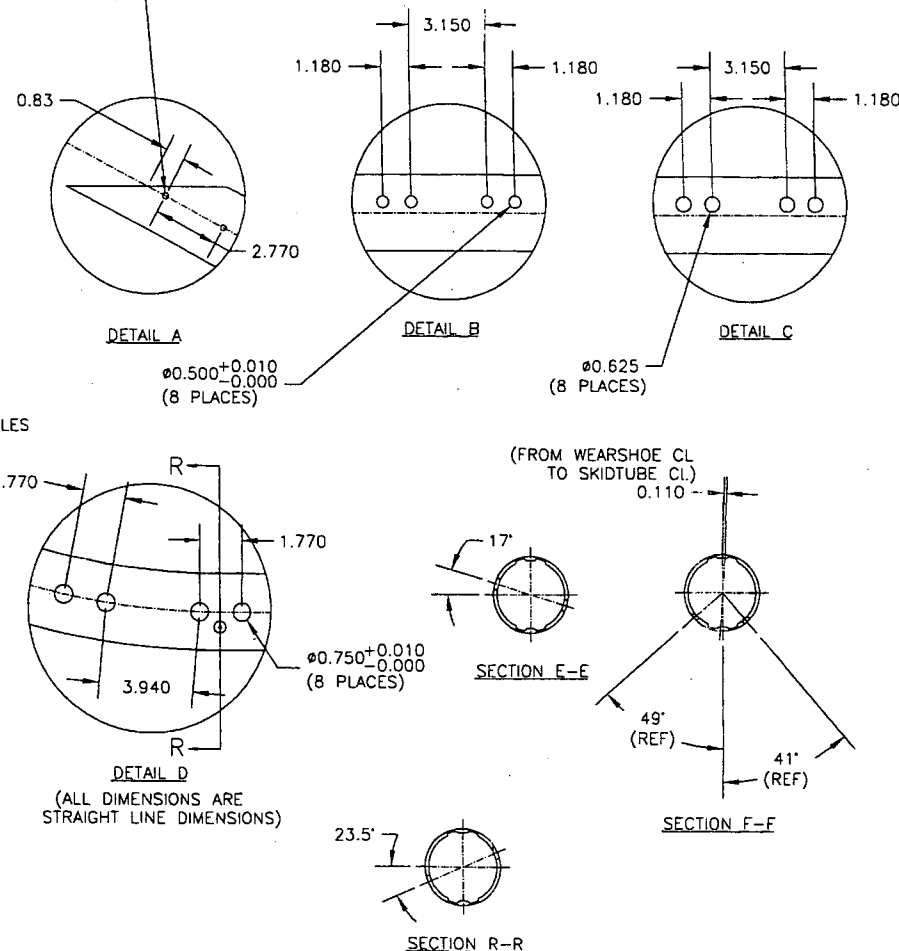
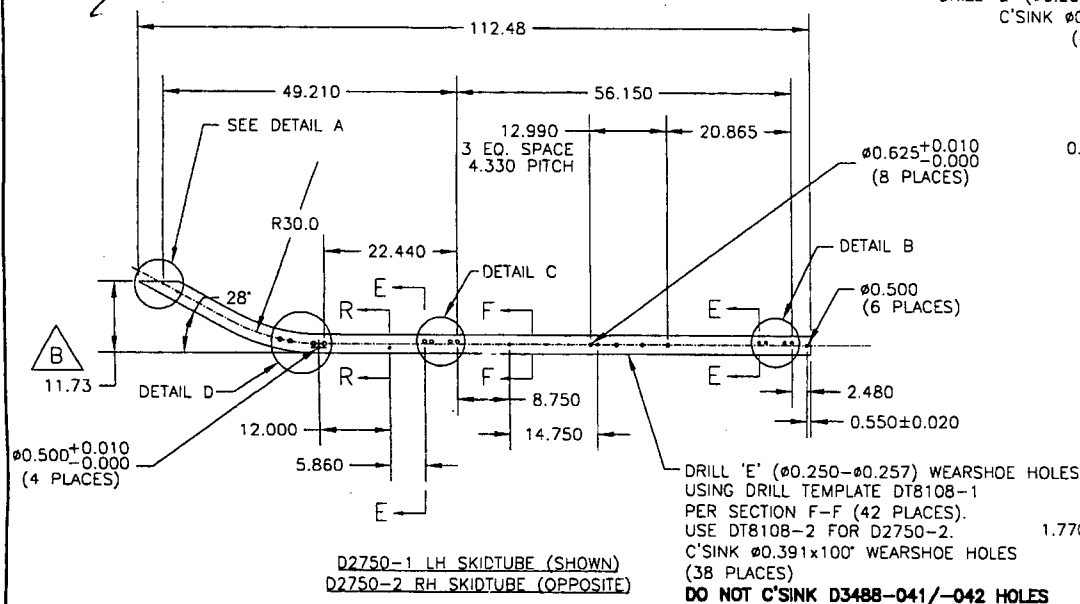
UNDER REVIEW

OK  
CB

07.01.15 (8)

SS - 001 plates

RELEASED  
00.02.07 #



D2750-3 LH SKIDTUBE (SHOWN)  
D2750-4 RH SKIDTUBE (OPPOSITE)  
D2750-3/-4 AND D2750-1/-2 HAVE THE SAME SADDLE AND  
GROUND HANDLING HOLES

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				DATE	06.01.05	D2750		SHEET 3 OF 5	
				TITLE		350 SKIDTUBE ASSEMBLY		SCALE	
								1:20	

UNDER REVIEW

07.07.05 CB  
for wear-plates

OK CB

**D2750-041/-042 ASSEMBLY**  
D2750-041 SHOWN (D2750-042 OPPOSITE)

BOND D2739 WEB INTO D2750-1 (OR D2750-2)  
OUTER TUBE WITH NON-STRUCTURAL  
SIKAFLEX-241 ADHESIVE PER DART QSI 015.  
NOTE: ENSURE THAT HOLES LINE UP.

SEE DET. P  
SEE DET. N  
D3488-041  
(OR D3488-042)

INSTALL NAS1330S3KB166  
INSERTS (4 PLACES)  
AFTER FINISH

INSTALL NAS1330S3KB166  
WEARSHOE INSERTS (38 PLACES)  
AFTER FINISH

BLACK ANTI-SKID

SEE DET. M

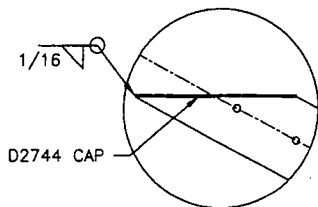
D2741

NO INSERT  
WELDED SPACER  
NOT REQUIRED

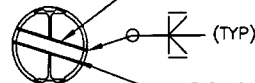
SEE DET. K

RELEASED  
06.02.07 #

**DETAIL G**



**SECTION H-H** D2743 SPACER (REF)



**SECTION J-J**



**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

**SECTION L-L**

D3490-3 SPACER (TYP)

Ø0.750 HOLES ONLY

D3492-043 PLUG ASSEMBLY

**SECTION S-S**

D3490-1 SPACER (TYP)

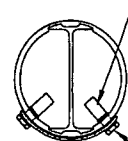
Ø0.500 HOLES ONLY

D3492-041 PLUG ASSEMBLY

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO Ø0.750 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS

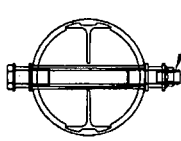
**DETAIL K**



USE AN3C7A BOLTS  
FOR INSTALLING AFT  
D2648-3 WEARPAD  
(4 PLACES)

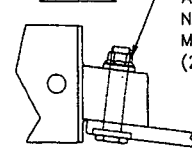
AN3C5A BOLT (1)  
AN960JD10L WASHER (1)  
NAS1515H3L WASHER (1)  
(38 PLACES)

**DETAIL M**



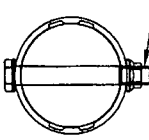
AN6-44A BOLT (1)  
D2745 BUSHING (2)  
NAS1515H8L WASHER (2)  
MS21043-6 NUT (1)  
(4 PLACES)  
NOTE: INSTALL WASHER BETWEEN  
SKIDTUBE AND BUSHING

**DETAIL N**



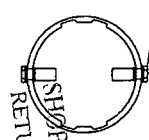
AN8C21A BOLT (1)  
AN960JD816L WASHER (1)  
NAS1515H8L WASHER (1)  
MS21083C8 NUT (1)  
(2 PLACES)

**DETAIL P**



AN8C35A BOLT (1)  
AN960C816L WASHER (2)  
NAS1515H8L WASHER (2)  
MS21083C8 NUT (2)

**DETAIL Q**



AN3C6A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(4 PLACES)

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CHECKED #	APPROVED #	DRAWING NO. D2750
DATE 06.01.05	TITLE 350 SKIDTUBE ASSEMBLY	REV. 0 SHEET 4 OF 5 SCALE 1:20

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01.01.65 CB

OK CB

SEE DET. Q

DETAIL G

INSTALL NAS1330S3KB166  
WEARSHOE INSERTS (38 PLACES)  
AFTER FINISH

RELEASED  
06.01.71

INSTALL NAS1330S3KB166  
INSERTS (4 PLACES)  
AFTER FINISH

**D2750-043/-044 ASSEMBLY**  
D2750-043 SHOWN (D2750-044 OPPOSITE)

BOND D2739 WEB INTO D2750-3 (OR D2750-4)  
OUTER TUBE WITH NON-STRUCTURAL  
SIKAFLEX-241 ADHESIVE PER DART QSI 015.  
NOTE: ENSURE THAT HOLES LINE UP.

SEE DET. P  
SEE DET. N  
D3488-041  
(OR D3488-042)

BLACK ANTI-SKID

D2741

SEE DET. M

NO INSERT

WELDED SPACER  
NOT REQUIRED

SEE DET. K

D2648-3

D2648-3

D2656-13

D2746

D2648-3

DETAIL G

1/16

D2744 CAP

SECTION H-H

D2743 SPACER (REF)

(TYP)

SECTION J-J

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

SECTION T-T

D3490-1 SPACER

(TYP)

Ø0.500 HOLES ONLY

D3492-041 PLUG ASSEMBLY

SECTION U-U

D3490-5 SPACER

Ø0.313 HOLES ONLY

D3492-045 PLUG ASSEMBLY

DETAIL K

USE AN3C7A BOLTS  
FOR INSTALLING AFT  
D2648-3 WEARPAD  
(4 PLACES)

AN3C5A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(38 PLACES)

DETAIL P

AN8C35A BOLT (1)  
AN960C816L WASHER (2)  
NAS1515H8L WASHER (2)  
MS21083C8 NUT (2)

DETAIL M

AN6C44A BOLT (1)  
D2745 BUSHING (2)  
NAS1515H8L WASHER (2)  
MS21043-6 NUT (1)  
(4 PLACES)  
NOTE: INSTALL WASHER BETWEEN  
SKIDTUBE AND BUSHING

DETAIL Q

AN3C6A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(4 PLACES)

DETAIL N

AN8C21A BOLT (1)  
AN960JD816L WASHER (1)  
NAS1515H8L WASHER (1)  
MS21083C8 NUT (1)  
(2 PLACES)

**WELDING INSTRUCTIONS**

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS

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CHECKED	#	APPROVED	#	DRAWING NO. D2750	SHEET 5 OF 5
DATE	06.01.05	TITLE	350 SKIDTUBE ASSEMBLY	SCALE	1:20

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NO. 113

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name Barclay Elliott  
Joint Welding Procedure Tig  
Part number and Job number 330636014 / B32531

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig  
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐  
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into N/A Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐  
Penetration Pass ☒ Fail ☐  
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/06/19 Qualifier Ronald Hurd